

CHIMAERA System For Cloud Retrievals v 6.0.85

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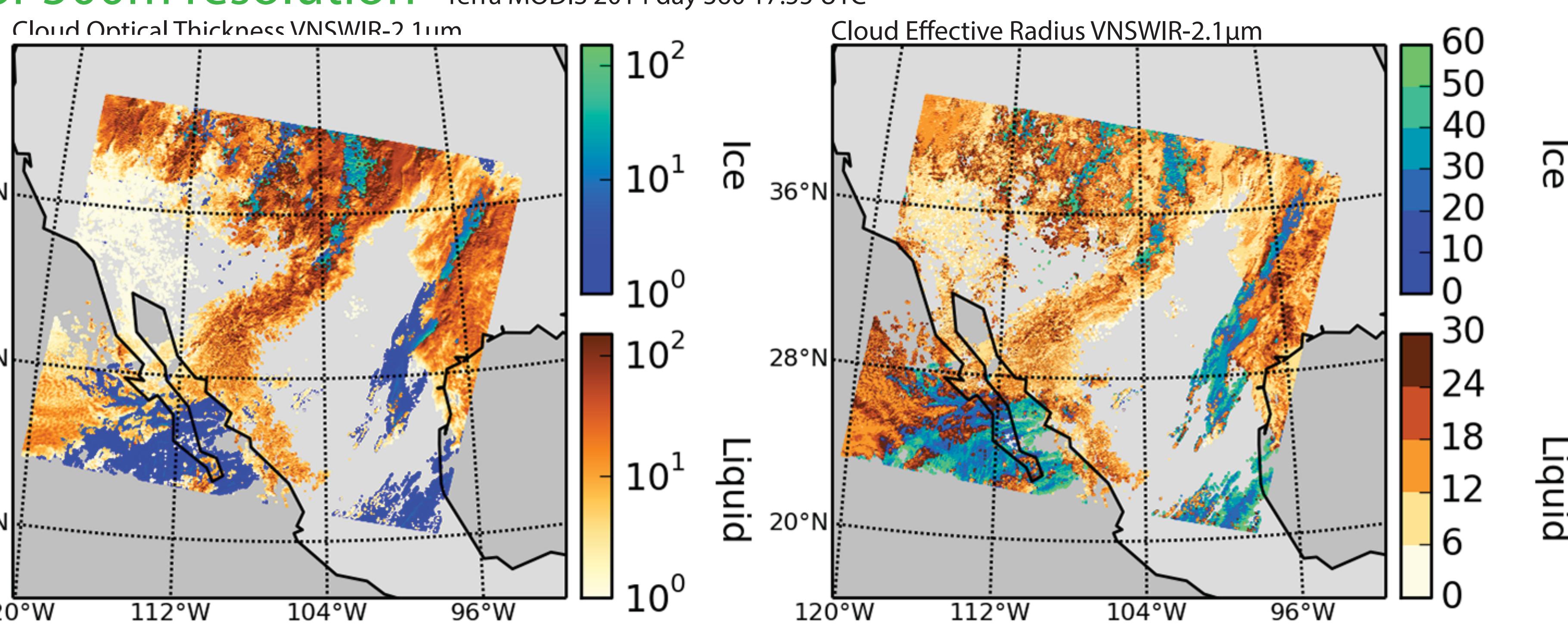
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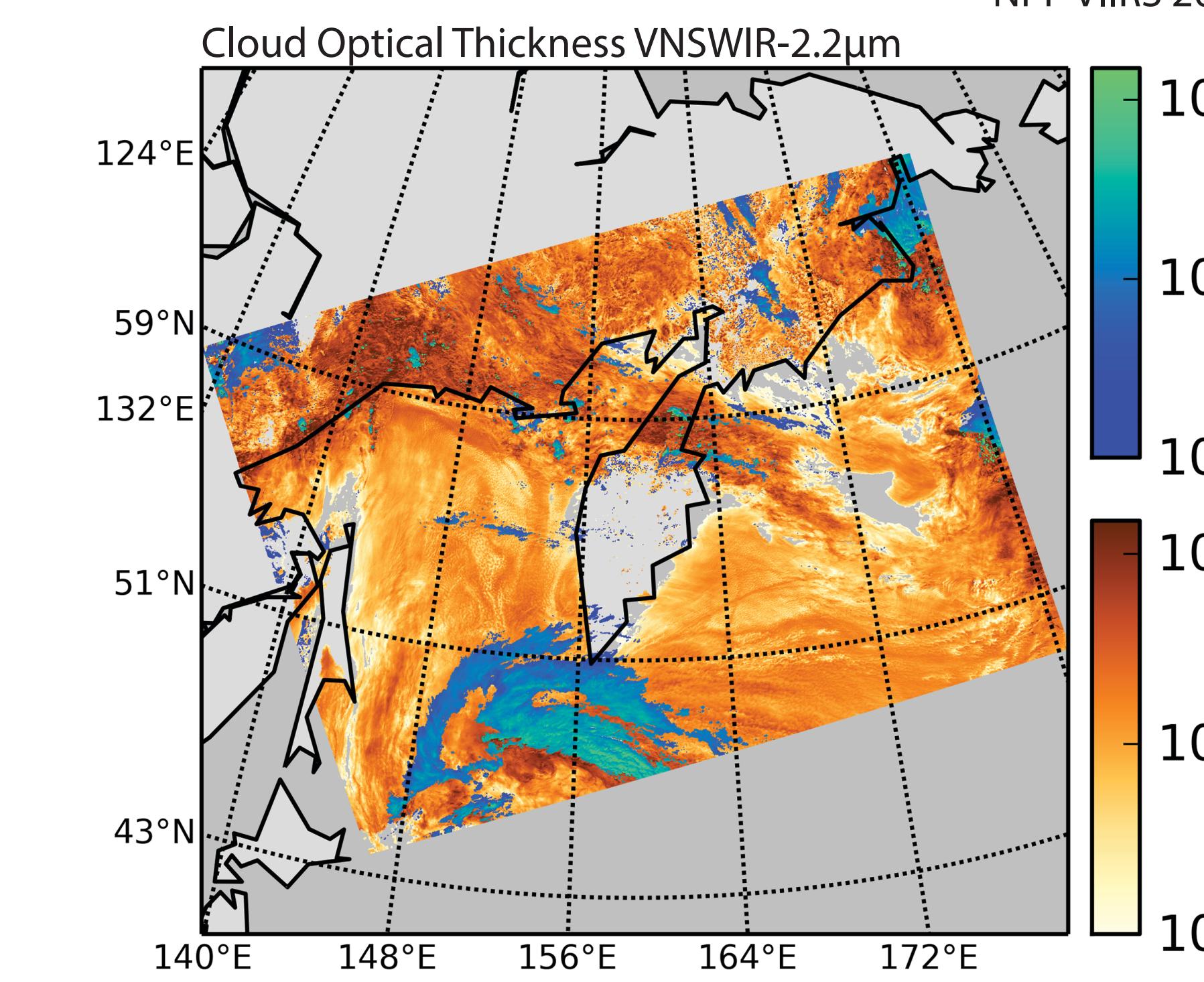
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CHIMAERA = Cross-platform High Resolution Multi-instrument AtmosphEric Retrieval Algorithms.

1km or 500m resolution



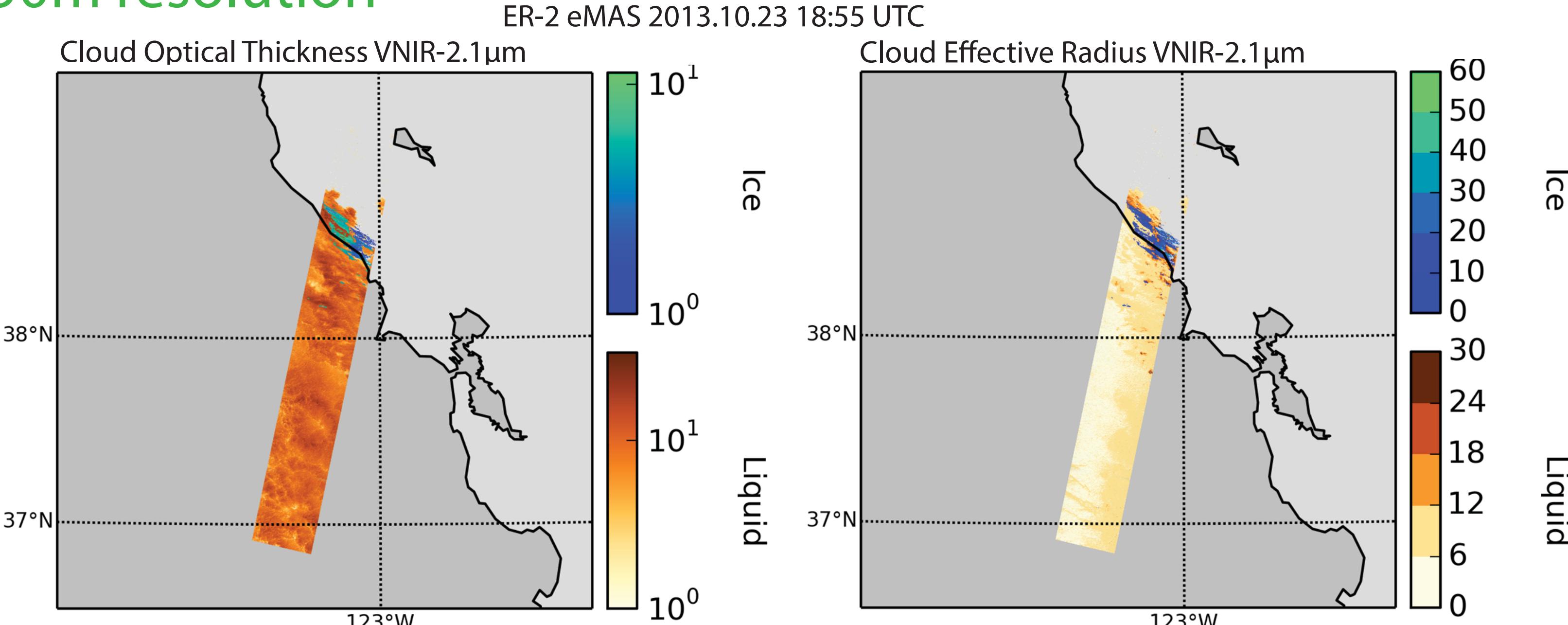
Ice
Liquid



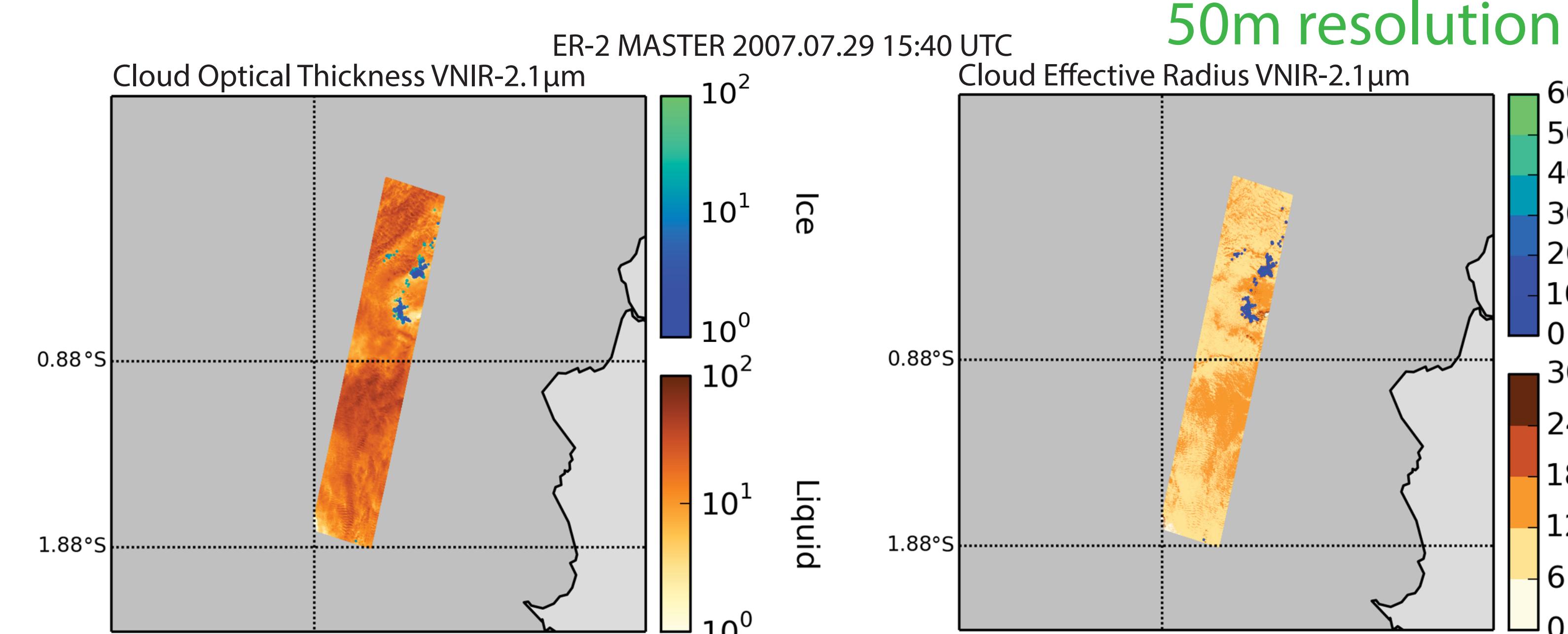
800m resolution

Ice
Liquid

50m resolution



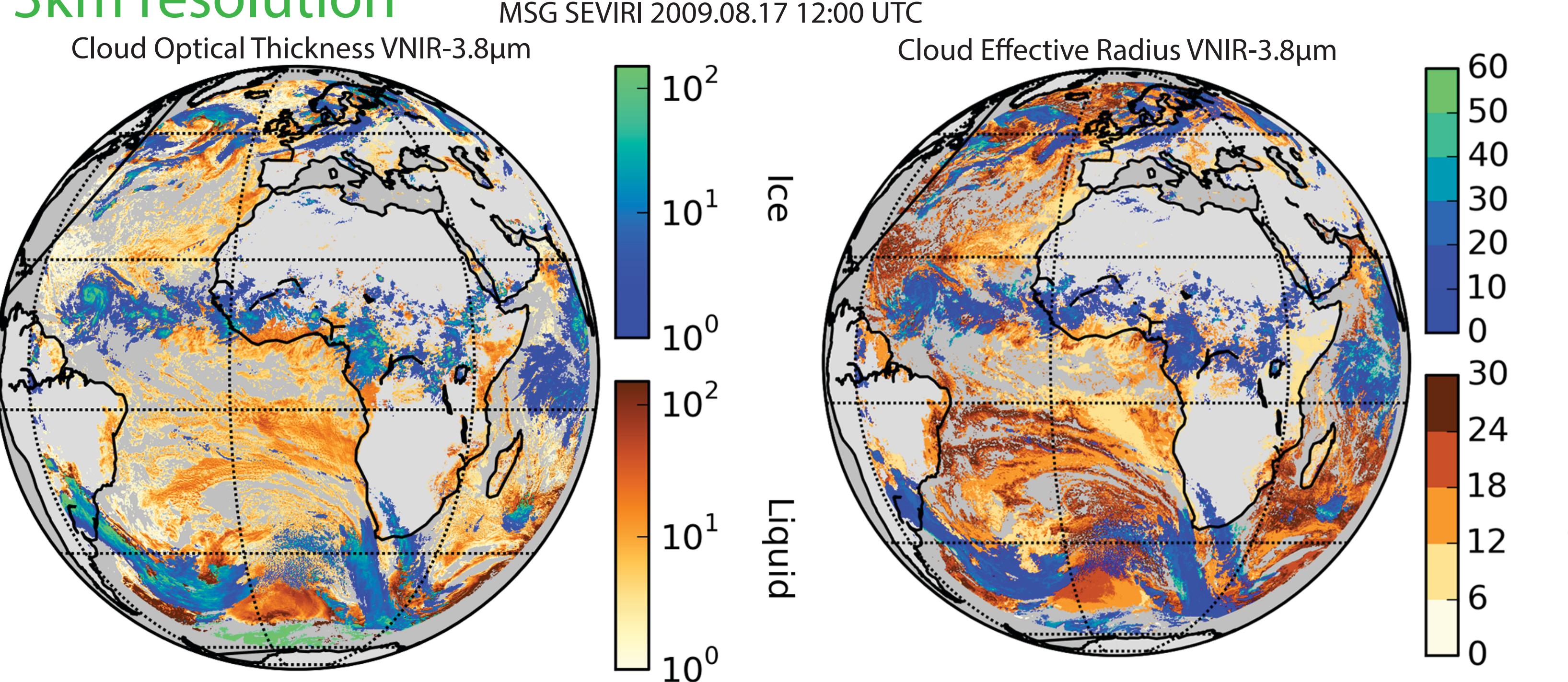
Ice
Liquid



50m resolution

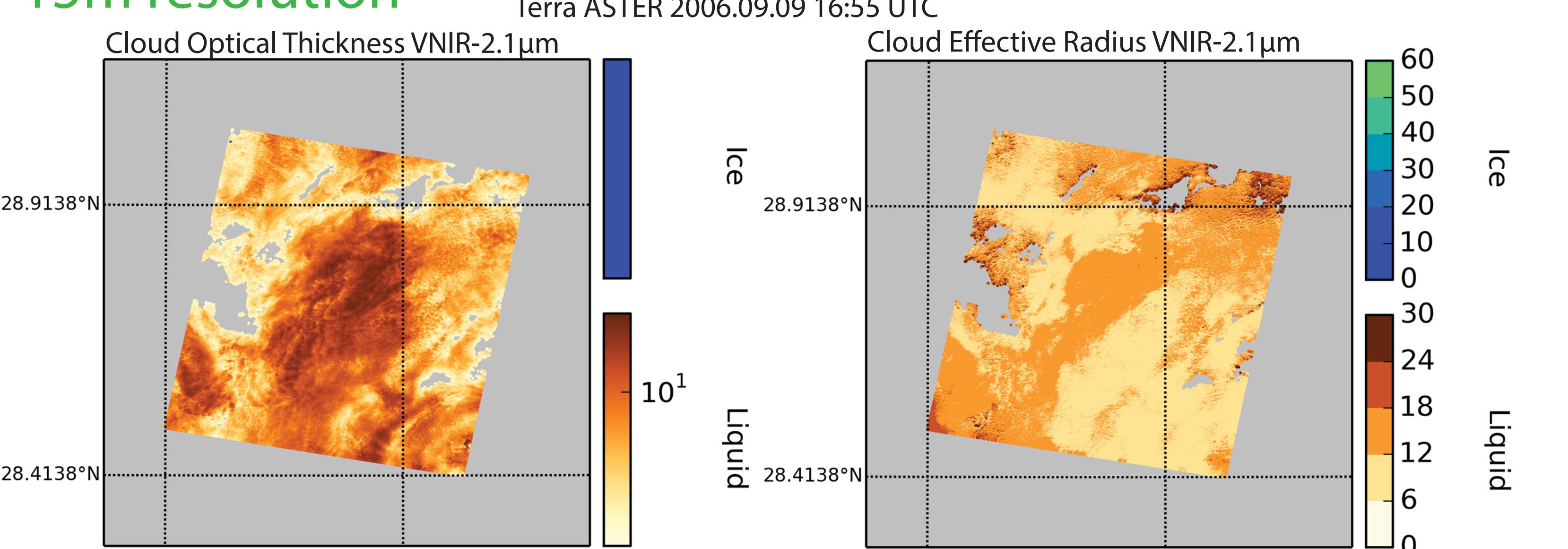
Ice
Liquid

3km resolution

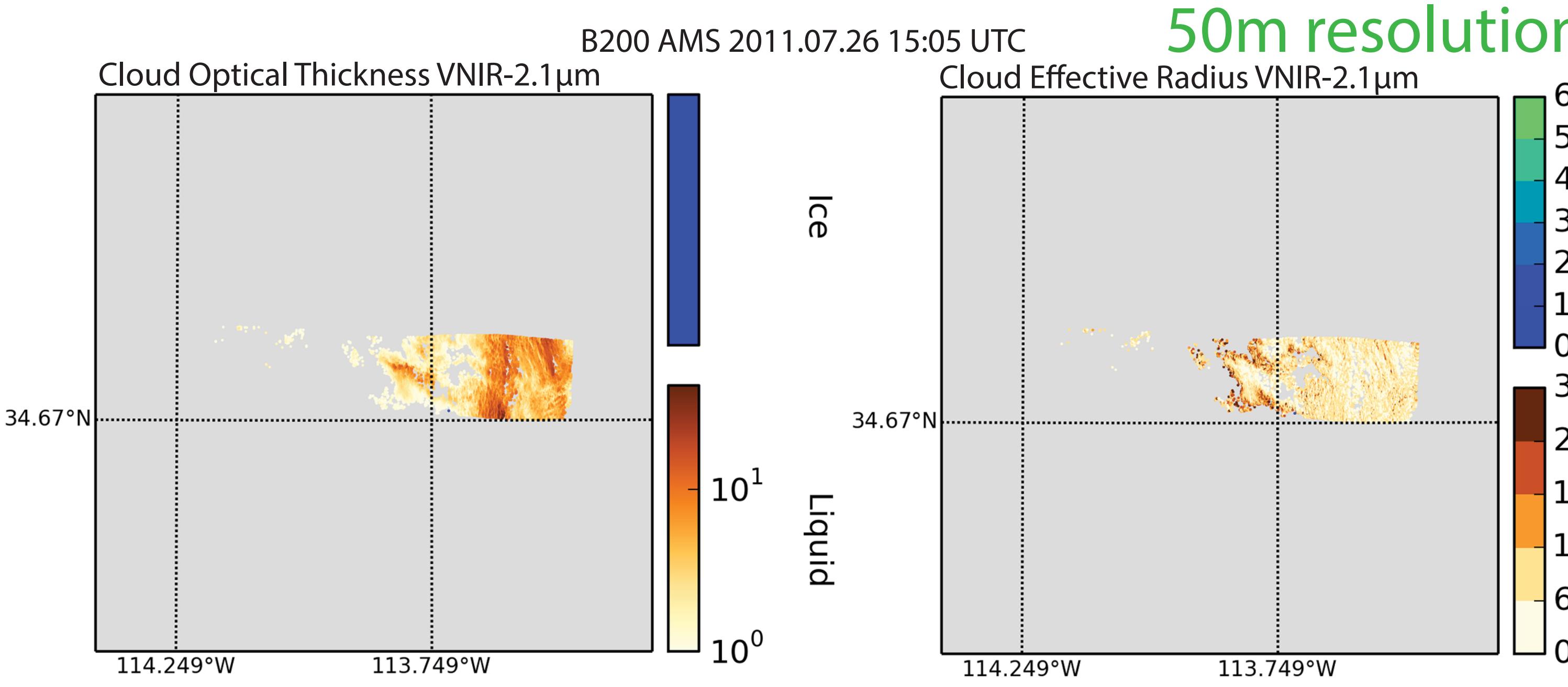


- Have bands? Will retrieve!
- Variety of ancillary model data accepted: NCEP GDAS, ECMWF, GMAO GEOS-5
- Choice of CO2 slicing or Optimal Estimation for cloud top
- Standard operational MOD6 code executed
- Single shared core for all instruments supported provides for easy extension.
- User provides a data reader and any external lookup tables for the instrument and CHIMAERA does the rest
- User provides a new science algorithm that retrieves one pixel and CHIMAERA does the rest
- Runs natively on every operating system (Windows via Cygwin) that has a Fortran compiler

15m resolution



Many instruments = One data format, one set of SDSs.
Ingest MODIS? Ingest everything, no code change.
Display MODIS? See everything, no code change.



50m resolution

Ice
Liquid



- AVIRIS and DSCOVR EPIC support
- Direct MPI execution for parallel machines
- Return of simulation data interface
- Retrieval algorithms other than standard MODIS cloud
- GOES-R
- PACE